



**VERIZON - NEW ENGLAND**

**COLLOCATION DC POWER COST STUDY  
TO SUPPORT THE APRIL 11, 2001 FCC FILING  
TRANSMITTAL NO. 1373  
F.C.C. NO. 11**

**REDACTED VERSION**



**DC POWER - MONTHLY RATE  
NEW ENGLAND  
Tariff F.C.C. No. 11  
Transmittal No. 1373, Workpaper 1-2**

<u>Line</u>	<u>Description</u>	<u>Source</u>	<u>Total</u>
1	Unit Investment	Cost Study	\$828.71
2	Depreciation	Cost Study	\$51.07
3	Cost of Capital	Cost Study	\$48.84
4	Income Tax	Cost Study	\$19.77
5	Other Tax	Cost Study	\$4.53
6	Maintenance	Cost Study	\$39.82
7	Administration	Cost Study	\$32.87
8	Annual Direct Cost	Sum Lines 2-7	\$196.90
9	Monthly Cost	Line 8/12	\$16.41
10	Overhead Loading Factor	Commission Prescribed	1.00
11	Monthly Rate	Line 9 * Line 10	<b>\$16.41</b>
12	Direct Cost to Rate	Line 9/ Line 11	1.00

**Demand, Costs and Rates**  
**Tariff F.C.C. No. 11**  
**Transmittal No. 1373, Workpaper 1-3**

	DEMAND (A)	COST (B)	RATE (C)	ANNUAL COSTS (D=A*B)	ANNUAL REVENUES (E=A*C)
DC Power per amp per feed - Monthly Charge - (NY/CT)					
Physical	45000	\$ 19.18	\$ 25.32	\$ 863,100.00	\$ 1,139,400.00
Virtual	480	\$ 19.18	\$ 25.32	\$ 9,206.40	\$ 12,153.60
DC Power per amp per feed - Monthly Charge - (All other states)					
Physical	35000	\$ 16.41	\$ 16.41	\$ 574,350.00	\$ 574,350.00
Virtual	360	\$ 16.41	\$ 16.41	\$ 5,907.60	\$ 5,907.60
<b>TOTAL</b>				<b>\$ 1,452,564.00</b>	<b>\$ 1,731,811.20</b>

**REDACTED DATA - TAB 1:**

**Collocation Power FCC Cost Study Audit Trail: Explains where the prices (which are proprietary) can be found.**



PHYSICAL COLLOCATION  
Bell Atlantic - New England  
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DC POWER - COST SUMMARY

<u>A</u>		<u>B</u>	<u>C</u>
<u>LINE NO.</u>	<u>ITEM</u>	<u>SOURCE</u>	<u>MONTHLY RECURRING</u>
<u>DC POWER PER AMP</u>			
1	LESS THAN OR EQUAL TO 60 AMPS	BA-NE, WP 1.0, PG 1, LN 11F	\$16.40
2	GREATER THAN 60 AMPS	BA-NE, WP 1.0, PG 2, LN 11F	\$16.44



PHYSICAL COLLOCATION  
BELL ATLANTIC - NEW ENGLAND  
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DC POWER - LESS THAN OR EQUAL TO 60 AMPS

- WEIGHTED -

A	B	C	D	E	F	G	H
ITEM	SOURCE	BA-MA	BA-ME	BA-NH	BA-RI	BA-VT	BA-NE
1 TOTAL WEIGHTED UNIT INVESTMENT	COST STUDY	\$505.77	\$94.39	\$103.29	\$79.04	\$45.62	\$828.12
2 DEPRECIATION	COST STUDY	\$30.92	\$6.00	\$6.47	\$4.82	\$2.81	\$51.03
3 COST OF CAPITAL	COST STUDY	\$29.99	\$5.47	\$6.00	\$4.69	\$2.65	\$48.81
4 INCOME TAX	COST STUDY	\$12.15	\$2.21	\$2.43	\$1.90	\$1.07	\$19.76
5 OTHER TAXES	COST STUDY	\$1.46	\$1.50	\$0.21	\$0.86	\$0.50	\$4.52
6 MAINTENANCE	COST STUDY	\$26.62	\$3.62	\$4.37	\$2.96	\$2.22	\$39.79
7 ADMINISTRATION	COST STUDY	\$21.45	\$3.20	\$3.60	\$2.89	\$1.72	\$32.85
8 ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$122.58	\$22.00	\$23.09	\$18.12	\$10.96	\$196.76
9 MONTHLY COST	LINE 8 / 12	\$10.22	\$1.83	\$1.92	\$1.51	\$0.91	\$16.40
10 OVERHEAD LOADING FACTOR	WP 6.0, PG 1, LINE 25	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11 MONTHLY RATE	LINE 9 x LINE 10	\$10.22	\$1.83	\$1.92	\$1.51	\$0.91	\$16.40
12 DIRECT COST TO RATE	LINE 9 / LINE 11	1.00	1.00	1.00	1.00	1.00	1.00

PHYSICAL COLLOCATION  
BELL ATLANTIC - NEW ENGLAND  
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DC POWER - GREATER THAN 60 AMPS

- WEIGHTED -

A ITEM	B SOURCE	C D E F G					H BA-NE
		BA-MA	BA-ME	BA-NH	BA-RI	BA-VT	
1 TOTAL WEIGHTED UNIT INVESTMENT	COST STUDY	\$505.80	\$95.32	\$104.05	\$79.32	\$46.03	\$830.51
2 DEPRECIATION	COST STUDY	\$30.93	\$6.06	\$6.52	\$4.84	\$2.83	\$51.18
3 COST OF CAPITAL	COST STUDY	\$29.99	\$5.52	\$6.04	\$4.71	\$2.68	\$48.95
4 INCOME TAX	COST STUDY	\$12.15	\$2.24	\$2.45	\$1.90	\$1.08	\$19.81
5 OTHER TAXES	COST STUDY	\$1.46	\$1.51	\$0.21	\$0.86	\$0.50	\$4.55
6 MAINTENANCE	COST STUDY	\$26.62	\$3.65	\$4.40	\$2.98	\$2.24	\$39.89
7 ADMINISTRATION	COST STUDY	\$21.45	\$3.23	\$3.63	\$2.90	\$1.73	\$32.93
8 ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$122.59	\$22.21	\$23.26	\$18.19	\$11.06	\$197.31
9 MONTHLY COST	LINE 8 / 12	\$10.22	\$1.85	\$1.94	\$1.52	\$0.92	\$16.44
10 OVERHEAD LOADING FACTOR	WP 6.0, PG 1, LINE 25	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11 MONTHLY RATE	LINE 9 x LINE 10	\$10.22	\$1.85	\$1.94	\$1.52	\$0.92	\$16.44
12 DIRECT COST TO RATE	LINE 9 / LINE 11	1.00	1.00	1.00	1.00	1.00	1.00

PHYSICAL COLLOCATION  
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DC POWER - LESS THAN OR EQUAL TO 60 AMPS

	A	B	C	D	E	F	G	H	I
LINE NO.	ITEM	SOURCE	DEPRECIATION	COST OF CAPITAL	INCOME TAX	OTHER TAXES	MAINT.	ADMIN.	TOTAL
1	MASSACHUSETTS	WP 1.0, PG 1, LINES 2 THRU 7	\$48.47	\$47.01	\$19.04	\$2.28	\$41.72	\$33.62	\$192.14
2	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26C	0.638	0.638	0.638	0.638	0.638	0.638	0.638
3	BA-MA WEIGHTED COST	LINE 1 X LINE 2	\$30.92	\$29.99	\$12.15	\$1.46	\$26.62	\$21.45	\$122.58
4	MAINE	WP 2.0, PG 1, LINES 2 THRU 7	\$61.24	\$55.82	\$22.59	\$15.28	\$36.92	\$32.60	\$224.46
5	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26D	0.098	0.098	0.098	0.098	0.098	0.098	0.098
6	BA-ME WEIGHTED COST	LINE 4 X LINE 5	\$6.00	\$5.47	\$2.21	\$1.50	\$3.62	\$3.20	\$22.00
7	NEW HAMPSHIRE	WP 3.0, PG 1, LINES 2 THRU 7	\$55.81	\$51.73	\$20.95	\$1.83	\$37.68	\$31.03	\$199.04
8	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26E	0.116	0.116	0.116	0.116	0.116	0.116	0.116
9	BA-NH WEIGHTED COST	LINE 7 X LINE 8	\$6.47	\$6.00	\$2.43	\$0.21	\$4.37	\$3.60	\$23.09
10	RHODE ISLAND	WP 4.0, PG 1, LINES 2 THRU 7	\$49.22	\$47.90	\$19.34	\$8.77	\$30.25	\$29.44	\$184.93
11	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26F	0.098	0.098	0.098	0.098	0.098	0.098	0.098
12	BA-RI WEIGHTED COST	LINE 10 X LINE 11	\$4.82	\$4.69	\$1.90	\$0.86	\$2.96	\$2.89	\$18.12
13	VERMONT	WP 5.0, PG 1, LINES 2 THRU 7	\$57.25	\$54.15	\$21.88	\$10.12	\$45.30	\$35.04	\$223.74
14	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26G	0.049	0.049	0.049	0.049	0.049	0.049	0.049
15	BA-VT WEIGHTED COST	LINE 13 X LINE 14	\$2.81	\$2.65	\$1.07	\$0.50	\$2.22	\$1.72	\$10.96

PHYSICAL COLLOCATION  
Bell Atlantic - New England  
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DC POWER - GREATER THAN 60 AMPS

LINE NO.	ITEM	SOURCE	DEPRECIATION	COST OF CAPITAL	INCOME TAX	OTHER TAXES	MAINT.	ADMIN.	TOTAL
1	MASSACHUSETTS	WP 1.1, PG 1, LINES 2 THRU 7	\$48.47	\$47.01	\$19.04	\$2.29	\$41.72	\$33.62	\$192.15
2	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26C	0.638	0.638	0.638	0.638	0.638	0.638	0.638
3	BA-MA WEIGHTED COST	LINE 1 X LINE 2	\$30.93	\$29.99	\$12.15	\$1.46	\$26.62	\$21.45	\$122.59
4	MAINE	WP 2.1, PG 1, LINES 2 THRU 7	\$61.84	\$56.37	\$22.81	\$15.43	\$37.28	\$32.92	\$141.01
5	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26D	0.098	0.098	0.098	0.098	0.098	0.098	0.098
6	BA-ME WEIGHTED COST	LINE 4 X LINE 5	\$6.06	\$5.52	\$2.24	\$1.51	\$3.65	\$3.23	\$22.21
7	NEW HAMPSHIRE	WP 3.1, PG 1, LINES 2 THRU 7	\$56.22	\$52.11	\$21.10	\$1.85	\$37.95	\$31.26	\$200.50
8	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26E	0.116	0.116	0.116	0.116	0.116	0.116	0.116
9	BA-NH WEIGHTED COST	LINE 7 X LINE 8	\$6.52	\$6.04	\$2.45	\$0.21	\$4.40	\$3.63	\$23.26
10	RHODE ISLAND	WP 4.1, PG 1, LINES 2 THRU 7	\$49.40	\$48.07	\$19.40	\$8.80	\$30.36	\$29.55	\$185.57
11	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26F	0.098	0.098	0.098	0.098	0.098	0.098	0.098
12	BA-RI WEIGHTED COST	LINE 10 X LINE 11	\$4.84	\$4.71	\$1.90	\$0.86	\$2.98	\$2.90	\$18.19
13	VERMONT	WP 5.1, PG 1, LINES 2 THRU 7	\$57.76	\$54.64	\$22.08	\$10.21	\$45.71	\$35.35	\$225.75
14	BA-NE WEIGHTING	WP 6.0, PG 1, LINE 26G	0.049	0.049	0.049	0.049	0.049	0.049	0.049
15	BA-VT WEIGHTED COST	LINE 13 X LINE 14	\$2.83	\$2.68	\$1.08	\$0.50	\$2.24	\$1.73	\$11.06

**PHYSICAL COLLOCATION**  
**Bell Atlantic - Massachusetts**  
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**DC POWER - LESS THAN OR EQUAL TO 60 AMPS**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b><u>ITEM</u></b>	<b><u>SOURCE</u></b>	<b><u>LAND</u></b>	<b><u>BLDG</u></b>	<b><u>SWITCH EQPT.</u></b>	<b><u>TOTAL INVEST</u></b>
1 TOTAL POWER PLANT UNIT INVESTMENT	WP 1.0, PG 3, LINE 46	-	-	\$240.50	\$240.50
2 EF&I FACTOR - FRC 377C	WP 6.0, PG 1, LINE 24C	-	-	2.7852	2.7852
3 INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$669.83	\$669.83
4 UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5 TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$669.83	\$669.83
6 LAND INVESTMENT FACTOR	WP 6.0, PG 1, LINE 22C	0.0000	-	-	0.0000
7 BUILDING INVESTMENT FACTOR	WP 6.0, PG 1, LINE 23C	-	0.1835	-	0.1835
8 LAND INVESTMENT	LINE 5E x LINE 6C	\$0.00	-	-	\$0.00
9 BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$122.91	-	\$122.91
10 TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$0.00	\$122.91	\$669.83	\$792.75
11 WEIGHTED UNIT INVESTMENT	LINE 10 x WP 6.0, PG 1, LINE 26C	\$0.00	\$78.42	\$427.35	\$505.77

**PHYSICAL COLLOCATION**  
**Bell Atlantic - Massachusetts**  
**FCC - 11**

**DC POWER - LESS THAN OR EQUAL TO 60 AMPS**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b><u>ITEM</u></b>	<b><u>SOURCE</u></b>	<b><u>LAND</u></b>	<b><u>BLDG</u></b>	<b><u>CKT EQPT.</u></b>	<b><u>TOTAL INVEST</u></b>
1 TOTAL UNIT INVESTMENT	WP 1.0, PG 2 LINE 10	\$0.00	\$122.91	\$669.83	\$792.75
2 DEPRECIATION	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$3.12	\$45.35	\$48.47
3 COST OF CAPITAL	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$10.30	\$36.71	\$47.01
4 INCOME TAX	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$4.17	\$14.87	\$19.04
5 OTHER TAXES	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$2.15	\$0.13	\$2.28
6 MAINTENANCE	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$4.28	\$37.44	\$41.72
7 ADMINISTRATION	LINE 1 X WP 6.0 - ACF FACTOR	<u>\$0.00</u>	<u>\$5.22</u>	<u>\$28.40</u>	<u>\$33.62</u>
8 ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$0.00	\$29.24	\$162.90	\$192.14
9 WEIGHTED UNIT INVESTMENT	LINE 8 x WP 6.0, PG 1, LINE 26C	\$0.00	\$18.65	\$103.93	\$122.58

**PHYSICAL COLLOCATION**  
**Bell Atlantic - Massachusetts**  
**FCC NO. 11**

**DC POWER COST DEVELOPMENT - LESS THAN OR EQUAL TO 60 AMPS**

LINE NO.	A ITEM	B SOURCE	C METRO	D URBAN	E SUBURBAN	F RURAL
	<u>Microprocessor Plant (BUSS BAR)</u>					
1	AMP	Engineering	5,000	2,600	2,600	1,200
2	Material	Engineering	\$22,500	\$17,000	\$12,000	\$9,000
3	Unit Investment Per AMP	(L2 / L1)	\$4.50	\$6.54	\$4.62	\$7.50
4	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
5	Statewide Unit Investment Per AMP	<b>\$5.45</b>	\$0.35	\$2.30	\$2.36	\$0.44
	WP 1.0, PG 3, LINE 10					
	<u>Rectifiers</u>					
6	Quantity	Engineering	5	5	6	5
7	AMPS per unit	Engineering	400	200	200	200
8	Tot. AMPS	(L6 * L7)	2,000	1,000	1,200	1,000
9	Utilization	(L6-1) / L6)	80.00%	80.00%	83.33%	80.00%
10	Material	Engineering	\$43,500	\$30,000	\$35,700	\$30,000
11	Total Investment	(L10 / L9)	\$54,375	\$37,500	\$42,840	\$37,500
12	Unit Investment Per AMP	(L11 / L8)	\$27.19	\$37.50	\$35.70	\$37.50
13	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
14	Statewide Unit Investment Per AMP	<b>\$35.78</b>	\$2.10	\$13.19	\$18.29	\$2.20
	<u>Batteries</u>					
15	Strings	Engineering	3	3	4	3
16	AMPS per String	Engineering	688	310	310	310
17	Tot. AMPS	(L15 * L16)	2,064	930	1,240	930
18	Total Investment	Engineering	\$98,500	\$40,500	\$52,900	\$40,500
19	Unit Investment Per AMP	(L18 / L17)	\$47.72	\$43.55	\$42.66	\$43.55
20	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
21	Statewide Unit Investment Per AMP	<b>\$43.42</b>	\$3.68	\$15.32	\$21.86	\$2.56
	<u>Automatic Breaker</u>					
22	AMP per Breaker	Engineering	1,600	1,200	800	400
23	Total Investment	Engineering	\$50,000	\$40,000	\$35,000	\$20,000
24	Unit Investment Per AMP	(L23 / L22)	\$31.25	\$33.33	\$43.75	\$50.00
25	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
26	Statewide Unit Investment Per AMP	<b>\$39.49</b>	\$2.41	\$11.73	\$22.41	\$2.94
	<u>Power Distribution Service Cabinet</u>					
27	Amps	Engineering	800	800	400	400
28	Material	Engineering	\$7,000	\$4,000	\$3,700	\$2,700
29	Unit Investment Per AMP	(L28 / L27)	\$8.75	\$5.00	\$9.25	\$6.75
30	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
31	Statewide Unit Investment Per AMP	<b>\$7.57</b>	\$0.68	\$1.76	\$4.74	\$0.40
	<u>Emergency engine/turbine (auto start)</u>					
32	AMP Capacity	Engineering	1,505	1,216	868	278
33	Utilization	Engineering	70%	70%	70%	70%
34	Utilized AMPS	(L32 * L33)	1,054	851	608	195
35	Emerg. Engine Invest.	Engineering	\$75,600	\$38,200	\$34,000	\$21,500
36	Conduit/Emer Lights	Engineering	\$35,000	\$30,000	\$25,000	\$20,000
37	Total Investment	(L35 + L36)	\$110,600	\$68,200	\$59,000	\$41,500
38	Unit Investment Per AMP	(L37 / L34)	\$104.98	\$80.12	\$97.10	\$213.26
39	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
40	Statewide Unit Investment Per AMP	<b>\$98.56</b>	\$8.10	\$28.18	\$49.75	\$12.53
	<u>Battery Distribution Fuse Bay</u>					
41	AMP Capacity	Engineering	800	800	800	800
42	Material	Engineering	\$8,181	\$8,181	\$8,181	\$8,181
43	Unit Investment Per AMP	(L42 / L41)	\$10.23	\$10.23	\$10.23	\$10.23
44	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
45	Statewide Unit Investment Per AMP	<b>\$10.23</b>	\$0.79	\$3.60	\$5.24	\$0.60
46	Total Unit Investment - (Less than or Equal to 60 AMP's) - Sum Lines (5C+14C+21C+26C+31C+40C+45C)		<b>\$240.50</b>			

PHYSICAL COLLOCATION  
Bell Atlantic - Massachusetts  
FCC - 11

DC POWER - GREATER THAN 60 AMPS

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>
<u>ITEM</u>	<u>SOURCE</u>	<u>LAND</u>	<u>BLDG</u>	<u>SWITCH EQPT.</u>	<u>TOTAL INVEST</u>
1 TOTAL POWER PLANT UNIT INVESTMENT	WP 1.1, PG 3, LINE 46	-	-	\$240.51	\$240.51
2 EF&I FACTOR - FRC 377C	WP 6.0, PG 1, LINE 24C	-	-	2.7852	2.7852
3 INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$669.87	\$669.87
4 UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5 TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$669.87	\$669.87
6 LAND INVESTMENT FACTOR	WP 6.0, PG 1, LINE 22C	0.0000	-	-	0.0000
7 BUILDING INVESTMENT FACTOR	WP 6.0, PG 1, LINE 23C	-	0.1835	-	0.1835
8 LAND INVESTMENT	LINE 5E x LINE 6C	\$0.00	-	-	\$0.00
9 BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$122.92	-	\$122.92
10 TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$0.00	\$122.92	\$669.87	\$792.79
11 WEIGHTED UNIT INVESTMENT	LINE 10 x WP 6.0, PG 1, LINE 26C	\$0.00	\$78.42	\$427.38	\$505.80



**PHYSICAL COLLOCATION**  
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**DC POWER - GREATER THAN 60 AMPS**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b><u>ITEM</u></b>	<b><u>SOURCE</u></b>	<b><u>LAND</u></b>	<b><u>BLDG</u></b>	<b><u>CKT EQPT.</u></b>	<b><u>TOTAL INVEST</u></b>
1 TOTAL UNIT INVESTMENT	WP 1.1, PG 2 LINE 10	\$0.00	\$122.92	\$669.87	\$792.79
2 DEPRECIATION	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$3.12	\$45.35	\$48.47
3 COST OF CAPITAL	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$10.30	\$36.71	\$47.01
4 INCOME TAX	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$4.17	\$14.87	\$19.04
5 OTHER TAXES	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$2.15	\$0.13	\$2.29
6 MAINTENANCE	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$4.28	\$37.45	\$41.72
7 ADMINISTRATION	LINE 1 X WP 6.0 - ACF FACTOR	<u>\$0.00</u>	<u>\$5.22</u>	<u>\$28.40</u>	<u>\$33.62</u>
8 ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$0.00	\$29.24	\$162.91	\$192.15
9 WEIGHTED UNIT INVESTMENT	LINE 8 x WP 6.0, PG 1, LINE 26C	\$0.00	\$18.65	\$103.94	\$122.59

**PHYSICAL COLLOCATION**  
**Bell Atlantic - Massachusetts**  
**FCC NO. 11**

**DC POWER COST DEVELOPMENT - GREATER THAN 60 AMPS**

LINE NO.	A ITEM	B SOURCE	C METRO	D URBAN	E SUBURBAN	F RURAL
	<u>Microprocessor Plant (BUSS BAR)</u>					
1	AMP	Engineering	5,000	2,600	2,600	1,200
2	Material	Engineering	\$22,500	\$17,000	\$12,000	\$9,000
3	Unit Investment Per AMP	(L2 / L1)	\$4.50	\$6.54	\$4.62	\$7.50
4	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
5	Statewide Unit Investment Per AMP		\$5.45	\$2.30	\$2.36	\$0.44
	<u>Rectifiers</u>					
6	Quantity	Engineering	5	5	6	5
7	AMPS per unit	Engineering	400	200	200	200
8	Tot. AMPS	(L6 * L7)	2,000	1,000	1,200	1,000
9	Utilization	(L6-1) / L6)	80.00%	80.00%	83.33%	80.00%
10	Material	Engineering	\$43,500	\$30,000	\$35,700	\$30,000
11	Total Investment	(L10 / L9)	\$54,375	\$37,500	\$42,840	\$37,500
12	Unit Investment Per AMP	(L11 / L8)	\$27.19	\$37.50	\$35.70	\$37.50
13	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
14	Statewide Unit Investment Per AMP		\$35.78	\$2.10	\$18.29	\$2.20
	<u>Batteries</u>					
15	Strings	Engineering	3	3	4	3
16	AMPS per String	Engineering	688	310	310	310
17	Tot. AMPS	(L15 * L16)	2,064	930	1,240	930
18	Total Investment	Engineering	\$98,500	\$40,500	\$52,900	\$40,500
19	Unit Investment Per AMP	(L18 / L17)	\$47.72	\$43.55	\$42.66	\$43.55
20	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
21	Statewide Unit Investment Per AMP		\$43.42	\$15.32	\$21.86	\$2.56
	<u>Automatic Breaker</u>					
22	AMP per Breaker	Engineering	1,600	1,200	800	400
23	Total Investment	Engineering	\$50,000	\$40,000	\$35,000	\$20,000
24	Unit Investment Per AMP	(L23 / L22)	\$31.25	\$33.33	\$43.75	\$50.00
25	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
26	Statewide Unit Investment Per AMP		\$39.49	\$2.41	\$22.41	\$2.94
	<u>Power Distribution Service Cabinet</u>					
27	Amps	Engineering	800	800	400	400
28	Material	Engineering	\$7,000	\$4,000	\$3,700	\$2,700
29	Unit Investment Per AMP	(L28 / L27)	\$8.75	\$5.00	\$9.25	\$6.75
30	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
31	Statewide Unit Investment Per AMP		\$7.57	\$1.76	\$4.74	\$0.40
	<u>Emergency engine/turbine (auto start)</u>					
32	AMP Capacity	Engineering	1,505	1,216	868	278
33	Utilization	Engineering	70%	70%	70%	70%
34	Utilized AMPS	(L32 * L33)	1,054	851	608	195
35	Emerg. Engine Invest.	Engineering	\$75,600	\$38,200	\$34,000	\$21,500
36	Conduit/Emer Lights	Engineering	\$35,000	\$30,000	\$25,000	\$20,000
37	Total Investment	(L35 + L36)	\$110,600	\$68,200	\$59,000	\$41,500
38	Unit Investment Per AMP	(L37 / L34)	\$104.98	\$80.12	\$97.10	\$213.26
39	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
40	Statewide Unit Investment Per AMP		\$98.56	\$28.18	\$49.75	\$12.53
	<u>Power Plant Distribution Bay</u>					
41	AMP Capacity	Engineering	2,600	1,200	1,200	300
42	Material	Engineering	\$20,000	\$15,000	\$10,000	\$5,000
43	Unit Investment Per AMP	(L42 / L41)	\$7.69	\$12.50	\$8.33	\$16.67
44	Statewide Weighting	WP 6.0, Pg 1, Lns 27C-30C	0.0772	0.3518	0.5123	0.0588
45	Statewide Unit Investment Per AMP		\$10.24	\$4.40	\$4.27	\$0.98
46	Total Unit Investment - (Less than or Equal to 60 AMP's) - Sum Lines (5C+14C+21C+26C+31C+40C+45C)		\$240.51			

**PHYSICAL COLLOCATION**  
**Bell Atlantic - Maine**  
**FCC - 11**

**DC POWER - LESS THAN OR EQUAL TO 60 AMPS**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b><u>ITEM</u></b>	<b><u>SOURCE</u></b>	<b><u>LAND</u></b>	<b><u>BLDG</u></b>	<b><u>SWITCH EQPT.</u></b>	<b><u>TOTAL INVEST</u></b>
1 TOTAL POWER PLANT UNIT INVESTMENT	WP 2.0, PG 3, LINE 46	-	-	\$309.69	\$309.69
2 EF&I FACTOR - FRC 377C	WP 6.0, PG 1, LINE 24D	-	-	2.7852	2.7852
3 INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$862.54	\$862.54
4 UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5 TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$862.54	\$862.54
6 LAND INVESTMENT FACTOR	WP 6.0, PG 1, LINE 22D	0.0000	-	-	0.0000
7 BUILDING INVESTMENT FACTOR	WP 6.0, PG 1, LINE 23D	-	0.1167	-	0.1167
8 LAND INVESTMENT	LINE 5E x LINE 6C	\$0.00	-	-	\$0.00
9 BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$100.66	-	\$100.66
10 TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$0.00	\$100.66	\$862.54	\$963.20
11 WEIGHTED UNIT INVESTMENT	LINE 10 x WP 6.0, PG 1, LINE 26D	\$0.00	\$9.86	\$84.53	\$94.39

PHYSICAL COLLOCATION  
Bell Atlantic - Maine  
FCC - 11

DC POWER - LESS THAN OR EQUAL TO 60 AMPS

A	B	C	D	E	F
ITEM	SOURCE	LAND	BLDG	CKT EQPT.	TOTAL INVEST
1 TOTAL UNIT INVESTMENT	WP 2.0, PG 2 LINE 10	\$0.00	\$100.66	\$862.54	\$963.20
2 DEPRECIATION	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$2.59	\$58.65	\$61.24
3 COST OF CAPITAL	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$8.29	\$47.53	\$55.82
4 INCOME TAX	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$3.35	\$19.23	\$22.59
5 OTHER TAXES	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$1.57	\$13.71	\$15.28
6 MAINTENANCE	LINE 1 X WP 6.0 - ACF FACTOR	\$0.00	\$8.55	\$28.38	\$36.92
7 ADMINISTRATION	LINE 1 X WP 6.0 - ACF FACTOR	<u>\$0.00</u>	<u>\$3.36</u>	<u>\$29.24</u>	<u>\$32.60</u>
8 ANNUAL DIRECT COST	SUM (LINE 2 THRU LINE 7)	\$0.00	\$27.71	\$196.75	\$224.46
9 WEIGHTED UNIT INVESTMENT	LINE 8 x WP 6.0, PG 1, LINE 26D	\$0.00	\$2.72	\$19.28	\$22.00

**PHYSICAL COLLOCATION**  
**Bell Atlantic - Maine**  
**FCC NO. 11**

**DC POWER COST DEVELOPMENT - LESS THAN OR EQUAL TO 60 AMPS**

LINE NO.	ITEM	SOURCE	URBAN	SUBURBAN	RURAL	
<u>Microprocessor Plant (BUSS BAR)</u>						
1	AMP	Engineering	2,600	2,600	1,200	
2	Material	Engineering	\$17,000	\$12,000	\$9,000	
3	Unit Investment Per AMP	(L2 / L1)	\$6.54	\$4.62	\$7.50	
4	Statewide Weighting	WP 6.0, Pg 1, Lns 28D-30D	0.0866	0.3660	0.5475	
5	Statewide Unit Investment Per AMP		\$6.36	\$0.57	\$1.69	\$4.11
<u>Rectifiers</u>						
6	Quantity	Engineering	5	6	5	
7	AMPS per unit	Engineering	200	200	200	
8	Tot. AMPS	(L6 * L7)	1,000	1,200	1,000	
9	Utilization	(L6-1) / L6	80.00%	83.33%	80.00%	
10	Material	Engineering	\$30,000	\$35,700	\$30,000	
11	Total Investment	(L10 / L9)	\$37,500	\$42,840	\$37,500	
12	Unit Investment Per AMP	(L11 / L8)	\$37.50	\$35.70	\$37.50	
13	Statewide Weighting	WP 6.0, Pg 1, Lns 28D-30D	0.0866	0.3660	0.5475	
14	Statewide Unit Investment Per AMP		\$36.84	\$3.25	\$13.07	\$20.53
<u>Batteries</u>						
15	Strings	Engineering	3	4	3	
16	AMPs per String	Engineering	310	310	310	
17	Tot. AMPS	(L15 * L16)	930	1,240	930	
18	Total Investment	Engineering	\$40,500	\$52,900	\$40,500	
19	Unit Investment Per AMP	(L18 / L17)	\$43.55	\$42.66	\$43.55	
20	Statewide Weighting	WP 6.0, Pg 1, Lns 28D-30D	0.0866	0.3660	0.5475	
21	Statewide Unit Investment Per AMP		\$43.23	\$3.77	\$15.61	\$23.84
<u>Automatic Breaker</u>						
22	AMP per Breaker	Engineering	1,200	800	400	
23	Total Investment	Engineering	\$40,000	\$35,000	\$20,000	
24	Unit Investment Per AMP	(L23 / L22)	\$33.33	\$43.75	\$50.00	
25	Statewide Weighting	WP 6.0, Pg 1, Lns 28D-30D	0.0866	0.3660	0.5475	
26	Statewide Unit Investment Per AMP		\$46.27	\$2.89	\$16.01	\$27.38
<u>Power Distribution Service Cabinet</u>						
27	Amps	Engineering	800	400	400	
28	Material	Engineering	\$4,000	\$3,700	\$2,700	
29	Unit Investment Per AMP	(L28 / L27)	\$5.00	\$9.25	\$6.75	
30	Statewide Weighting	WP 6.0, Pg 1, Lns 28D-30D	0.0866	0.3660	0.5475	
31	Statewide Unit Investment Per AMP		\$7.51	\$0.43	\$3.39	\$3.70
<u>Emergency engine/turbine (auto start)</u>						
32	AMP Capacity	Engineering	1,216	868	278	
33	Utilization	Engineering	70%	70%	70%	
34	Utilized AMPS	(L32 * L33)	851	608	195	
35	Emerg. Engine Invest.	Engineering	\$38,200	\$34,000	\$21,500	
36	Conduit/Emer Lights	Engineering	\$30,000	\$25,000	\$20,000	
37	Total Investment	(L35 + L36)	\$68,200	\$59,000	\$41,500	
38	Unit Investment Per AMP	(L37 / L34)	\$80.12	\$97.10	\$213.26	
39	Statewide Weighting	WP 6.0, Pg 1, Lns 28D-30D	0.0866	0.3660	0.5475	
40	Statewide Unit Investment Per AMP		\$159.24	\$6.94	\$35.54	\$116.76
<u>Battery Distribution Fuse Bay</u>						
41	AMP Capacity	Engineering	800	800	800	
42	Material	Engineering	\$8,181	\$8,181	\$8,181	
43	Unit Investment Per AMP	(L42 / L41)	\$10.23	\$10.23	\$10.23	
44	Statewide Weighting	WP 6.0, Pg 1, Lns 28D-30D	0.0866	0.3660	0.5475	
45	Statewide Unit Investment Per AMP		\$10.23	\$0.89	\$3.74	\$5.60
<u>Total Unit Investment - (Less than or</u>						
46	Equal to 60 AMP's) - Sum Lines		\$309.69			
(5C+14C+21C+26C+31C+40C+45C)						

PHYSICAL COLLOCATION  
Bell Atlantic - Maine  
FCC - 11

DC POWER - GREATER THAN 60 AMPS

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>
<u>ITEM</u>	<u>SOURCE</u>	<u>LAND</u>	<u>BLDG</u>	<u>SWITCH EQPT.</u>	<u>TOTAL INVEST</u>
1 TOTAL POWER PLANT UNIT INVESTMENT	WP 2.0, PG 3, LINE 46	-	-	\$312.72	\$312.72
2 EF&I FACTOR - FRC 377C	WP 6.0, PG 1, LINE 24D	-	-	2.7852	2.7852
3 INSTALLED INVESTMENT (NRC)	LINE 1 x LINE 2	-	-	\$870.98	\$870.98
4 UTILIZATION FACTOR	ENGINEERING	-	-	1.0000	1.0000
5 TOTAL IN-PLACE INVESTMENT	LINE 3 x LINE 4	-	-	\$870.98	\$870.98
6 LAND INVESTMENT FACTOR	WP 6.0, PG 1, LINE 22D	0.0000	-	-	0.0000
7 BUILDING INVESTMENT FACTOR	WP 6.0, PG 1, LINE 23D	-	0.1167	-	0.1167
8 LAND INVESTMENT	LINE 5E x LINE 6C	\$0.00	-	-	\$0.00
9 BUILDING INVESTMENT	LINE 5E x LINE 7D	-	\$101.64	-	\$101.64
10 TOTAL UNIT INVESTMENT	LINE 5E + LINE 8C + LINE 9D	\$0.00	\$101.64	\$870.98	\$972.62
11 WEIGHTED UNIT INVESTMENT	LINE 10 x WP 6.0, PG 1, LINE 26D	\$0.00	\$9.96	\$85.36	\$95.32